

HW 59

1. a) $2x - 5y > 10$
 $-2x \quad -2x$
 $-5y > -2x + 10$

$y < \frac{2}{5}x - 2$

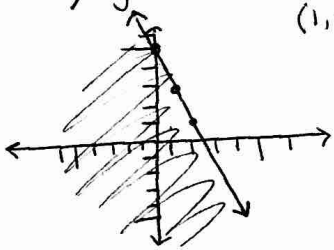
b) $8 - 12y + 2x > 14$

$-12y + 2x > 6$

$-12y > -2x + 6$

$y < \frac{1}{6}x - \frac{1}{2}$

2. a) $y \leq -2x + 5$



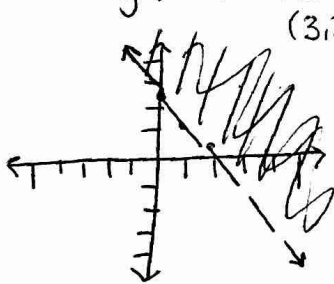
(1, 1)

$1 \leq -2 + 5$
 $1 \leq 3 \checkmark$

b) $2y + 2x > 5$

$2y > -2x + 5$

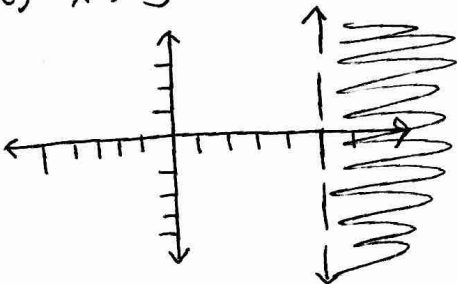
$y > -x + \frac{5}{2}$



(3, 3)

$3 > -3 + \frac{5}{2}$
 $3 > -1.5 \checkmark$

c) $x > 5$



3. a) $y < -\frac{1}{2}x + 2$

b) $y = \frac{3}{2}x + 3$

(-5, 5)

$5 \stackrel{?}{\geq} \frac{3}{2}(-5) + 3$

$5 \stackrel{?}{\geq} -7.5 + 3$

$5 \stackrel{?}{\geq} -4.5$

$y \geq \frac{3}{2}x + 3$

c) $y > -x + 1$

d) $y \leq \frac{1}{2}x + 1.5$

$2 \leq \frac{1}{2}(4) + 1.5$

$2 \leq 2 + 1.5$

$2 \leq 3.5 \checkmark$

4. $y \geq 2.4x + 2$

$y \leq x^2 - 2x + 6.4$

5.-7. see graphs on next page